

## AMENDMENTS TO THE CLAIMS

Please cancel Claims 19-21, 23, 24 and 27-34; and amend Claims 1 and 25 as follows.

### **LISTING OF CLAIMS**

1. (currently amended) An air conditioner for a vehicle, comprising:
  - a non-contact temperature sensor that detects a temperature in a predetermined area of a passenger compartment in non contact;
  - a control unit that controls an air state in the passenger compartment based on at least the temperature detected by the non-contact temperature sensor;
  - determining means for determining whether or not the temperature detected by the non-contact temperature sensor corresponds to an actual temperature of the passenger compartment; [[and]]
    - notifying means for notifying a passenger whether the temperature detected by the non-contact temperature sensor does not correspond to the actual temperature of the passenger compartment;
    - an outside air temperature sensor for detecting a temperature of outside air of the passenger compartment; and
      - a water temperature sensor for detecting a temperature of water for cooling a vehicle engine; wherein
        - even when the temperature detected by the non-contact temperature sensor does not correspond to the actual temperature of the passenger compartment, the notifying means does not notify a passenger in the passenger compartment when the

temperature of outside air detected by the outside air temperature sensor is lower than a predetermined air temperature; and

even when the temperature detected by the non-contact temperature sensor does not correspond to the actual temperature of the passenger compartment, the notifying means does not notify a passenger in the passenger compartment when the temperature of outside air detected by the outside air temperature sensor is lower than the predetermined air temperature and when the temperature of water detected by the water temperature sensor is lower than a predetermined water temperature.

2. (withdrawn) The air conditioner according to claim 1, wherein the non-contact temperature sensor is disposed at an attachment position that is changeable in the passenger compartment.

3. (previously presented) The air conditioner according to claim 1, wherein the notifying means is a light emitting device that is arranged at a position adjacent the non-contact temperature sensor.

4. (previously presented) The air conditioner according to claim 1, wherein the determining means determines whether the temperature detected by the non-contact temperature sensor at the present time does not correspond to the actual temperature of the passenger compartment based on a temperature detected by the non-contact temperature sensor at a time before a predetermined time period from the present time.

5. (withdrawn) The air conditioner according to claim 1, further comprising  
a temperature displaying portion that displaces a set temperature for  
controlling the air state in the passenger compartment,  
wherein the notifying means displaces a determination result of the  
determining means by using the temperature displaying portion.

6. (previously presented) The air conditioner according to claim 1, further  
comprising

environment condition detection means for detecting an environment  
condition except for the temperature detected by the non-contact temperature sensor,  
wherein:

the control unit controls the air state in the passenger compartment based  
on the temperature detected by the non-contact temperature sensor and the environment  
condition detected by the environment condition detection means; and

the determining means determines whether the temperature detected by  
the non-contact temperature sensor corresponds to the actual temperature of the  
passenger compartment based on the environment condition detected by the  
environment condition detection means.

7. (withdrawn) The air conditioner according to claim 6, wherein the  
environment condition detection means is a solar radiation detection means for detecting  
a solar radiation amount entering into the passenger compartment.

8. (withdrawn) The air conditioner according to claim 1, wherein the determining means determines whether the temperature detected by the non-contact temperature sensor corresponds to the actual temperature of the passenger compartment based on whether the temperature detected by the non-contact temperature sensor is within a predetermined range for a predetermined time.

9. (previously presented) An air conditioner for a vehicle, comprising:

- a non-contact temperature sensor that detects a temperature in a predetermined area of a passenger compartment in non contact;
- a control unit that controls an air state in the passenger compartment based on at least the temperature detected by the non-contact temperature sensor;
- determining means for determining whether or not the temperature detected by the non-contact temperature sensor is abnormal; and
- notifying means for notifying a passenger whether the temperature detected by the non-contact temperature sensor is abnormal; wherein
  - the determining means determines whether the temperature detected by the non-contact temperature sensor corresponds to the actual temperature of the passenger compartment based on whether a state where the temperature detected by the non-contact temperature sensor is within a predetermined range for a predetermined time.

10. (original) The air conditioner according to claim 1, wherein the predetermined area includes a plurality of temperature detection ranges.

11. (withdrawn) The air conditioner according to claim 6, wherein:

the environment condition detection means includes an outside air detection means for detecting a temperature of outside air outside the passenger compartment; and

the determining means determines that the temperature detected by the non-contact temperature sensor corresponds to the actual temperature of the passenger compartment when the temperature detected by the non-contact temperature sensor corresponds to the temperature of outside air, detected by the outside air temperature sensor.

12. (withdrawn) The air conditioner according to claim 1, further comprising

an opening state determining unit for determining an opening state of a door or a window of the vehicle,

wherein the determining means determines that the temperature detected by the non-contact temperature sensor corresponds to the actual temperature of the passenger compartment when the opening state determining unit determines the opening state of the door or the window.

13. (withdrawn) The air conditioner according to claim 1, wherein:

when the determining means determines that the temperature detected by the non-contact temperature sensor does not correspond to the actual temperature in the passenger compartment, a provisional temperature is set as the temperature in the

predetermined area, and the control unit controls the air state in the passenger compartment based on the provisional temperature.

14. (previously presented) The air conditioner according to claim 1, wherein the determining means determines whether the temperature detected at the present time by the non-contact temperature sensor does not correspond to the actual temperature in the passenger compartment, based on the temperature detected at a previous time by the non-contact temperature sensor and the temperature detected at the present time by the non-contact temperature sensor.

15. (withdrawn) The air conditioner according to claim 1, wherein:  
the non-contact temperature sensor is arranged in a dashboard of the passenger compartment to face a driver's seat area, at a side opposite to a steering wheel with respect to a center portion of the dashboard in a vehicle lateral direction.

16.-24. (cancelled)

25. (currently amended) A control process of a computer for a vehicle air conditioner that includes a non-contact temperature sensor for detecting a temperature of a predetermined area in a passenger compartment of the vehicle in non-contact and a control unit for controlling an air state in the passenger compartment based on the temperature detected by the non-contact temperature sensor, the control process comprising:

determining whether the temperature detected by the non-contact temperature sensor does not correspond to the actual temperature in the passenger compartment; and

notifying a determination result in the determining step to a passenger in the passenger compartment; wherein

the determining step includes determining whether the temperature detected by the non-contact temperature sensor corresponds to the actual temperature of the passenger compartment based on whether a state where the temperature detected by the non-contact temperature sensor is within a predetermined range for a predetermined time.

26. (withdrawn) The control process according to claim 25, wherein an attachment position of the non-contact temperature sensor is changeable.

27.-34. (cancelled)